



7020

BOARD DIPLOMA EXAMINATION, (C-20)

MAY—2023

DCE - FIRST YEAR EXAMINATION

ENGINEERING DRAWING

Time : 3 Hours]

[Total Marks : 60

PART—A

5×4=20

Instructions : (1) Answer **all** questions.(2) Each question carries **five** marks.

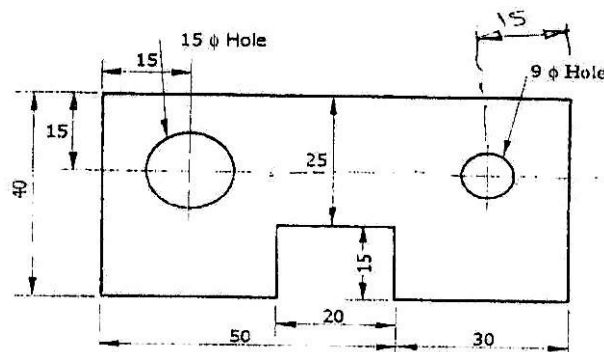
(3) Take suitable scale wherever required.

(4) All dimensional are in mm.

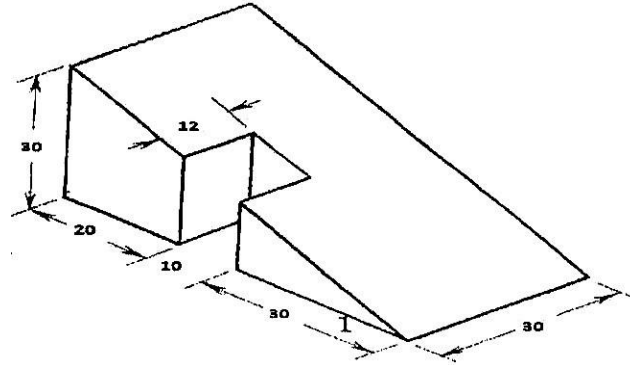
1. Print the following in 10 mm size single-stroke vertical capital lettering as per SP : 46-1988 :

“RURAL WATER SUPPLY AND SANITATION”

2. Redraw and dimension the following figure using ‘parallel dimensioning’ :



3. Construct a regular hexagon of base length 35 mm.
4. Draw the auxiliary view of the sloping side of the object given below :



PART—B

10×4=40

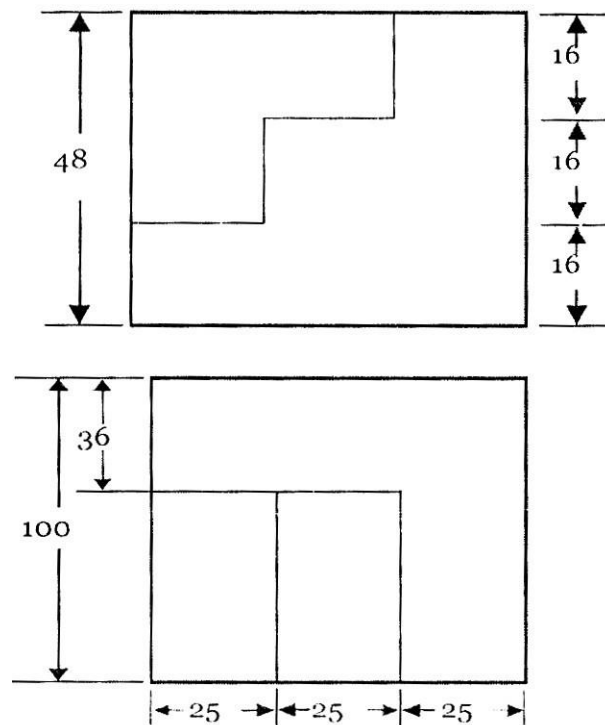
Instructions : (1) Answer *any four* questions.
(2) Each question carries **ten** marks.

5. Construct an ellipse by concentric circles method whose major and minor axes are 120 mm and 80 mm respectively.
6. Draw the projections of a pentagon which is perpendicular to V.P. and making an angle of 45° to H.P. Also one of its sides is on H.P. Take side of pentagon as 30 mm.
7. A cone of 25 mm radius and 70 mm axis is resting on H.P. with its base. A cutting plane perpendicular to V.P. and 30° to H.P. cuts the solid at mid-height of the cone. Draw the front view and sectional top view.

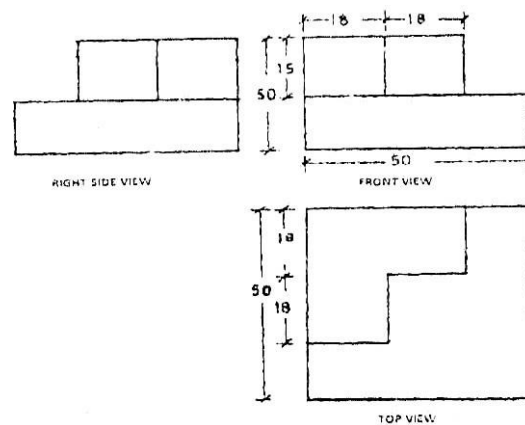
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8. Draw the isometric view of the object whose orthographic views are given below :



9. Draw the isometric view of the block whose top, front and side views are given below :



10. A square prism of side 25 mm and axis 70 mm is resting with its base on ground. A cutting plane inclined at 30° to the H.P. and passing through mid-height of the axis cuts the solid. Develop the lateral surface of the bottom portion of the prism.